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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,401	07/28/2003	Herman Spencer JR.	TRIRG-01004US0	7215
28554 7590 09/27/2007 VIERRA MAGEN MARCUS & DENIRO LLP 575 MARKET STREET SUITE 2500 SAN FRANCISCO, CA 94105			EXAMINER JONES, HUGH M	
			ART UNIT 2128	PAPER NUMBER
			MAIL DATE 09/27/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/629,401

Applicant(s)

SPENCER ET AL.

Examiner

Hugh Jones

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 is/are allowed.
- 6) ☒ Claim(s) 23-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>8/24/2007</u>                            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application  |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                           |

### DETAILED ACTION

1. Claims 13, 23-25 of U. S. Application 10/629,401, filed 7/28/2003, are pending. A second interview was granted to Applicants in an unsuccessful attempt to point out novel material in the application, resolve the 112 rejections and bring the application to issue in a compact manner. An interview summary is attached to this action.

#### **Claim Rejections - 35 USC § 112**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

4. Amended claim 23 recites:

23. (Currently Amended) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method comprising the steps of:

finding a door gap in the drawing;

determining a room relative to said door; and

marking said drawing to indicate a room definition,

wherein the step of finding a door gap ~~comprises code for~~ includes performing the sub-steps of:

selecting a first group of contact points and a second group of contact points,

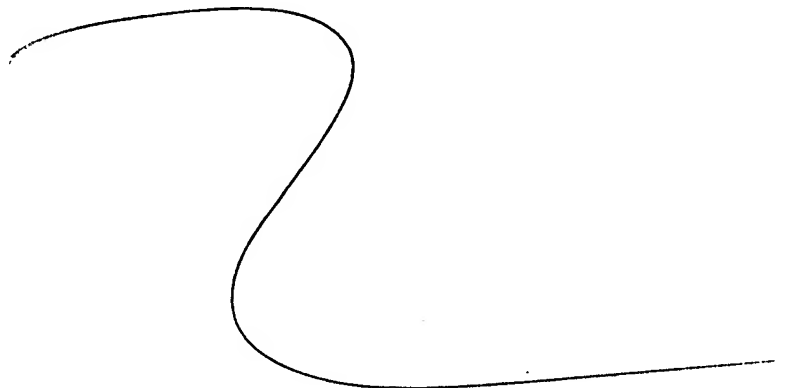
following an outside edge of a first group of contact points until it reaches an edge that crosses between the groups,

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following the outside edge of the second group of contact points until it reaches a second edge that crosses between the groups, and  
comparing the first crossing edge to a first previous edge and the second crossing edge to a second previous edge to determine if the difference is greater than a threshold and associated with a gap.

5. The claim, as amended, now *requires* only one iteration and comparison (*comparing first and second crossings* is now amended to *comparing first and second crossing edge*). The claim further does not define what the “difference” represents and what the ‘threshold’ is rated to.

6. However, the specification *requires* an iterative comparison (*of specific items*) until a threshold (namely, length) is satisfied before a door gap can be determined. In the amended claim, the door gap is somehow “found” (in the ‘substeps’) regardless of whether “the difference is greater than a threshold” (the claim requires determination of the gap, regardless of whether the ‘difference’ is greater than an undefined ‘threshold’. Consider the situation where the difference is not greater than a threshold; the claim *still requires that the gap has been found*. Such a teaching is simply not provided in the specification. The specification *does not* teach how to determine the door gap in the absence of said conditions being met. In fact, the specification teaches that the gap line (the doorway) is only determined when certain conditions are met, namely:



[0073] In the target group, a first point (any point) is selected. In this case, the point "c" is selected. Next, one determines the left-most point in the source group (where the source is to the right of the target group), in this case point "s", and a line is determined between them. This line is considered an "edge line". Point "s" is an edge point by definition. Next, the algorithm seeks to find the next line to a point with biggest angular distance relative to the edge line. In this case, this next line is the line from "s" to "x1". X1 is now considered an edge point. Then the system will determine the next "edge" point with reference to the s-x1 line, which will be the line from x1 - x2. These steps are repeated until an edge point is found which is not in the source group, in this case, point "S". This occurs when the length of the line compared to the previous edge line is larger than the maximum wall thickness. The line formed by the last edge point from the source group and the edge point found in the target group is considered as a gap line.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Claim 23 recites:

23. (Currently Amended) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method comprising the steps of:

finding a door gap in the drawing;

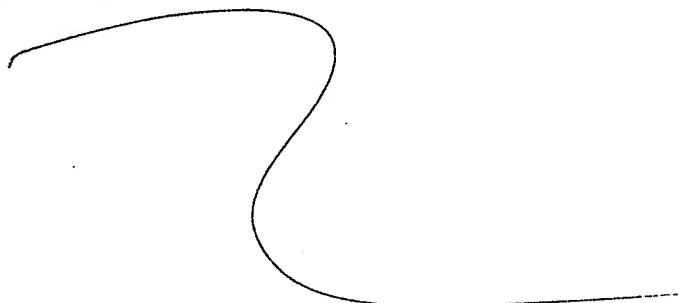
determining a room relative to said door; and

marking said drawing to indicate a room definition,

wherein the step of finding a door gap ~~comprises code for~~ includes performing the sub-steps of:

selecting a first group of contact points and a second group of contact points,

following an outside edge of a first group of contact points until it reaches an edge that crosses between the groups,



following the outside edge of the second group of contact points until it reaches a second edge that crosses between the groups, and  
comparing the first crossing edge to a first previous edge and the second crossing edge to a second previous edge to determine if the difference is greater than a threshold and associated with a gap.

9. However, there is no nexus between “comparing the first and second crossing edges” and “finding a door gap”. Nothing is done after the comparison that would result in a finding of the door gap. The nexus is disclosed on page 18 of the specification:

reference to the s-x1 line, which will be the line from x1 – x2. These steps are repeated until an edge point is found which is not in the source group, in this case, point “S”. This occurs when the length of the line compared to the previous edge line is larger than the maximum wall thickness. The line formed by the last edge point from the source group and the edge point found in the target group is considered as a gap line.

### **Response to Arguments**

10. Applicant's arguments, filed 8/20/2007, have been carefully considered and are not persuasive.
11. Applicants are thanked for the amended drawing, which has been entered.
12. Applicants argue:

#### **IV. Priority**

The Examiner indicated that the prior-filed application, Application no. 60/398,924 (“the provisional application”), fails to provide adequate support or enablement in the manner provided by 35 USC 112, first paragraph, for one or more claims of the present application. The Examiner does not specify which claims he asserts are not enabled, but notes that there are “at least six more pages in the non-provisional application than in the provisional application” and requests a showing of support for the claimed invention in the provisional application to traverse the finding.

Applicant respectfully points out that the provisional application was filed without claims or an abstract. The non-provisional application includes 8 pages comprised of claims and an abstract that were not in the provisional application. The claims and abstract pages account for the difference in pages between the non-provisional application and provisional application. The provisional application also did not contain Figure 2B of the non-provisional application and corresponding paragraphs [0043] and [0045]. Other than these differences and some corrected typographical

13. As stated in the rejection, there are 25 pages of specification in the non-provisional application, and 19 pages of specification in the provisional application. However, the difference *appears* to be accounted for by paragraphs 43, 45 (noted by Applicants) as well as the difference in font size. Priority is granted because the claims do not *require* said paragraphs for support. Furthermore, Applicant's assistance was requested, namely, to provide a showing of support. Applicants declined. The Examiner has therefore determined that support is found in the first paragraph of page 4, of the provisional application.

14. Applicant's arguments relating to the 112-2 rejections are not persuasive. Applicants argue:

Examiner indicated in the interview on August 13, 2007, that claim 23 was missing an essential step because it did not recite criteria for the comparison element. Applicant respectfully submits that the elements cited in claim 23 before the amendment made in this Response did not omit any essential matter. The amendment made herein is strictly to expedite prosecution of claims which Examiner had indicated contained allowable subject matter in the Office Action dated October 6, 2006. Amended claim 23 now indicates that the first crossing edge and a second edge are compared to corresponding previous edges to determine if the difference is greater than a threshold criteria and associated with a gap. Applicants submit that amended claim 23 now recites criteria as requested by the Examiner and that these rejections are now moot.

15. Respectfully, Applicants have not explained how the 112 rejection has been traversed by the amendment. Claim 23 recites:

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23. (Currently Amended) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a method comprising the steps of:

finding a door gap in the drawing;

determining a room relative to said door; and

marking said drawing to indicate a room definition,

wherein the step of finding a door gap ~~comprises code for~~ includes performing the sub-steps of:

selecting a first group of contact points and a second group of contact points,

following an outside edge of a first group of contact points until it reaches an edge that crosses between the groups,

following the outside edge of the second group of contact points until it reaches a second edge that crosses between the groups, and

comparing the first crossing edge to a first previous edge and the second crossing edge to a second previous edge to determine if the difference is greater than a threshold and associated with a gap.

16. As explained in the second interview, the criterion has not been claimed. The difference of what? Angle? Length? Something else? What is the criterion for choosing the threshold? There is no nexus between some undefined comparing using some undefined criterion, and somehow finding a door gap.

17. There is a missing essential step between the comparing and the step of finding the gap since it is unclear as to what is being compared and the criterion for its comparison (the missing material is in paragraph 73 of the specification; Applicants have been repeatedly asked to include this material). The step is essential, because a nexus is required between comparing the edges and "finding a door gap". Nothing is done after the comparison that would result in a finding of the door gap. As stated in the last office action, the nexus is required, because as disclosed on page 18 of the specification:



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[0073] In the target group, a first point (any point) is selected. In this case, the point "c" is selected. Next, one determines the left-most point in the source group (where the source is to the right of the target group), in this case point "s", and a line is determined between them. This line is considered an "edge line". Point "s" is an edge point by definition. Next, the algorithm seeks to find the next line to a point with biggest angular distance relative to the edge line. In this case, this next line is the line from "s" to "x1". X1 is now considered an edge point. Then the system will determine the next edge point with reference to the s-x1 line, which will be the line from x1 - x2. These steps are repeated until an edge point is found which is not in the source group, in this case, point "S". This occurs when the length of the line compared to the previous edge line is larger than the maximum wall thickness. The line formed by the last edge point from the source group and the edge point found in the target group is considered as a gap line.

18. Respectfully, it is *impossible* to unambiguously determine the meaning of the claims.

### Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**21. Any inquiry concerning this communication or earlier communications from the examiner should be:**

directed to: Dr. Hugh Jones telephone number (571) 272-3781,

Monday-Thursday 0830 to 0700 ET,

**or**

the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, telephone number (703) 305-3900.

**mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**


(703) 308-9051 (for formal communications intended for entry)

**or** (703) 308-1396 (for informal or draft communications, please label *PROPOSED* or *DRAFT*).

Dr. Hugh Jones

Primary Patent Examiner

August 24, 2007

  
HUGH JONES Ph.D.  
PRIMARY PATENT EXAMINER  
TECHNOLOGY CENTER 2100